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EXAMINER	
HASSAN, SARAH	

ART UNIT	PAPER NUMBER
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.**	**Applicant(s)**
	10/525,156	KUNISCH, PAUL
	Examiner	**Art Unit**
	SARAH HASSAN	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/17/09 have been fully considered but they are not persuasive.

2. Applicant's Argument:

3. On page 5, applicant argues "Therefore, as Filfield does not relate to DSL technology, there is no reason why one skilled in the art would consult Filfield when meeting the problems pointed out in the instant specification."

4. Examiner's Response:

5. It should be noted that independent claims 15, 26, and 32 pertain to a "communication arrangement," and there is nowhere in the independent claims where DSL technology is mentioned. Furthermore, Fillfield discloses a constant impedance driver that can be utilized in high speed interface, and the devices in Kumar that employ DSL are high speed interfaces.

6. **Applicant's Argument:**

7. On page 5, applicant argues "Examiner refers to FET circuits having a certain impedance, but not to an impedance unit that can be connected to the transmission line."

8. Examiner's Response:

9. “Impedance unit” is not explicitly mentioned or defined in the disclosure of the instant US application. Thus, it is unclear what is meant by "impedance unit."

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 15, 26, and 32 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

12. As to claims 15, 26, and 32, there is no where in the disclosure or the claims pertaining to “impedance unit.”

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 15, 26, and 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. As to claims 15, 26, and 32, it is unclear as to what is meant by “impedance unit.” Is the impedance unit referring to the line driver or the sensing unit.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 15-21, 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et. al., US Publication No. 2001/0040917 published on November 15, 2001 in view of Fifield et. al., US Publication No. 20020163360 published on November 7, 2002.

18. As to claim 15, Kumar teaches “A communication arrangement for an information transfer over a transmission line operatively connected to a first transmission unit” [see Figure 1]. Kumar specifically teaches a single transceiver connected on a line. The single transceiver device corresponds to “first transmission unit.” The arrangement in Figure 1 corresponds to the "communications arrangement" because it provides a transceiver device connected to a line or "transmission line."

> “the first transmission unit for communicating information with an input impedance dependent on a current operating state" [see Figure 2; paragraph

0028]. Kumar specifically teaches a high-speed communications device which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022]. In addition, Kumar specifically teaches a communication arrangement that receives data through different impedance states, and this would correspond to "current operating state."

“a sensor for detecting the current operating state of the first transmission unit” [see paragraphs 0029 and 0053]. Kumar specifically teaches communication protocols that decide when a high speed communication device is allowed to transmit or receive information based on the impedance state of the incoming signal. Further, these protocols include a line sensing technique that allows for sensing and detecting impedance states of an incoming signal.

“impedance assigned to the sensor” [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system such as high state (HI) and normal state (NI).

“wherein the current operating state comprises an active operating state or a passive operating state” [see paragraph 0044]. Kumar specifically teaches parallel communication devices that respond to each other based on an operating state of the signal generated from those devices. This operating state represents two main states of the impedance such as normal impedance state (NI) and high impedance state (HI).

It is noted however that Kumar does not teach “a switchable electrical component.”

“the detected current operating state such that the input impedance of the first transmission unit is kept to an approximately constant value.”

On the other hand, Filfield teaches “a switchable electrical component” [see paragraph 0019]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier in response to an input. The switching means is carried out in the predrive portion (40) as detailed in Figure 2. Thus, the predrive portion of the circuit corresponds to “switchable electrical component,” which is connected “by the impedance” of the PFET and NFET circuits in the pre drive portion (40) because FETs have high impedances in order to minimize the interference with or "loading" of the signal source when a measurement is made.

“the detected current operating state” [see Figure 2, item 40, ‘IN’]. Filfield discloses a predrive portion of the driver which receives a data input signal which indicates “detected current operating state” as detailed in paragraph 0019.

“such that the input impedance of the first transmission unit is kept to an approximately constant value” [see paragraph 0022]. Filfield discloses a driver circuit as detailed in Figure 2 that maintains constant or "approximately constant value" impedance with the help of a control voltage generated in differential amplifier portion (60).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kumar with the teachings of Filfield because Filfield provides constant impedance driver for data transfer between IC chips in order to avoid reflections and data integrity problems that would be associated with variable impedance, thus providing efficient transfer of data as detailed in paragraph 0004.

19. As to claim 16, Kumar teaches "the communication information is sent from the first transmission unit or received by the first transmission unit" [see Figure 3]. Kumar specifically teaches a high speed communication device or transceiver device that transmits a signal with a generated transmit power. In addition, this communications system discloses a transceiver B device that receives incoming data, signals, or "communication information."

20. As to claim 17, Kumar teaches "the communication information is sent from the first transmission unit and received by the first transmission unit" [see Figure 3]. Kumar specifically teaches a high speed communication device or transceiver device that transmits a signal with a generated transmit power. In addition, this communications system discloses a transceiver B device that receives incoming data, signals, or "communication information."

21. As to claim 18, Kumar teaches “the first transmission unit” [see Figure 2; paragraph 0028]. Kumar specifically teaches a transceiver that corresponds to a high speed communications device that transmits data along a transmission line, and this corresponds to “first transmission unit.”

“the impedance and the sensor being adapted” [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system such as high state (HI) and normal state (NI). These sensing protocols that are located at the receiving end of the transceiver device adapt to the impedance changes on the transmission line by transmitting during a high impedance state.

“open in the active operating state and closed in the passive operating state”[see paragraph 0044]. Kumar specifically teaches parallel communication devices that respond to each other based on an operating state of the signal generated from those devices. This operating state represents two main states of the impedance such as normal impedance state (NI) and high impedance state (HI). When in the HI state, this means the communications device is ready to transmit the signal.

Filfield teaches “a plurality of operational amplifiers for transmitting the information onto the transmission line” [see Figure 7, items 706, 705]. Filfield discloses differential amplifers (706, 705) which corresponds to "plurality of operational amplifiers" included in the line driver circuitry as detailed in Figure 7. The line driver of Figure 7, and also detailed in Figure 2, can be applied to

mitigate the effects of reflection and mismatch while "transmitting the information onto the transmission line" as detailed in paragraph 0036.

“the switchable electrical component comprising a switch for switching between outputs of the plurality of operational amplifiers” [see paragraph 0059]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier section (“plurality of operational amplifiers”) in response to a data input as detailed in Figure 7, ‘Datain.’ The switching means is carried out in the predrive portion (703, 704) as detailed in Figure 7 and paragraph 0059. Thus, the predrive portion of the circuit corresponds to “switchable electrical component.”

22. As to claim 19, Kumar teaches “the communication arrangement.” [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022].

Filfield teaches “the switchable electrical component comprises an electrical resistor.” [see paragraph 0059]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier section (“plurality of operational amplifiers”) in response to a data input as detailed in Figure 7, ‘Datain.’ The switching means is carried out in the predrive portion (703, 704) as detailed in Figure 7 and paragraph 0059. Thus, the

predrive portion of the circuit and output stage (30) corresponds to “switchable electrical component.” The ballast resistor (8) corresponds to “electrical resistor.”

23. As to claim 20, Kumar teaches “the communication arrangement.” [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022].

Fiflfield teaches “the switchable electrical component is operatively connected to an electrical resistor.” [see paragraph 0059]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier section (“plurality of operational amplifiers”) in response to a data input as detailed in Figure 7, ‘Datain.’ The switching means is carried out in the predrive portion (703, 704) as detailed in Figure 7 and paragraph 0059. Thus, the predrive portion of the circuit and output stage (30) corresponds to “switchable electrical component.” The ballast resistor (8) corresponds to “electrical resistor.”

24. As to claim 21, Kumar teaches “a transmission that is embodied in accordance with an xDSL transmission method” [see paragraph 0047]. Kumar specifically teaches high speed communications device that incorporate and use DSL transceiver modems.

25. As to claim 26, Kumar teaches "communicating information over a transmission line." [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device which corresponds to "a communication arrangement" because it transfers information along a transmission line [see paragraph 0022].

> "the current operating state having an active or a passive operating state" [see paragraph 0044]. Kumar specifically teaches parallel communication devices that respond to each other based on an operating state of the signal generated from those devices. This operating state represents two main states of the impedance such as normal impedance state (NI) and high impedance state (HI).
>
> "an input impedance dependent on a current operating state" [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device which corresponds to "a communication arrangement" because it transfers information along a transmission line [see paragraph 0022]. In addition, Kumar specifically teaches a communication arrangement that receives data through different impedance states, and this would correspond to "current operating state."
>
> "a sensor for detecting the current operating state of the transmission unit" [see paragraphs 0029 and 0053]. Kumar specifically teaches communication protocols that decide when a high speed communication device is allowed to transmit or receive information based on the impedance state of the

incoming signal. Further, these protocols include a line sensing technique that allows for sensing and detecting impedance states of an incoming signal.

"impedance assigned to the sensor" [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system such as high state (HI) and normal state (NI).

"the detected current operating state such that the input impedance of the first transmission unit is kept to an approximately constant value" [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system or sense "detected current operating state" such as two known and constant states: high state (HI) and normal state (NI).

It is noted however that Kumar does not teach "a switchable electrical component is connected by the impedance"

"the detected current operating state"

"such that the input impedance of the first transmission unit is kept to an approximately constant value"

On the other hand, Filfield teaches "a switchable electrical component is connected by the impedance" [see paragraph 0019]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier in response to an input. The switching means is carried out in the predrive portion (40) as detailed in Figure 2. Thus, the predrive portion of the

circuit corresponds to “switchable electrical component,” which is connected by the impedance of the PFET and NFET circuits in the pre drive portion (40) because FETs have high impedances in order to minimize the interference with or "loading" of the signal source when a measurement is made.

“the detected current operating state” [see Figure 2, item 40, ‘IN’]. Filfield discloses a predrive portion of the driver which receives a data input signal which indicates “detected current operating state” as detailed in paragraph 0019.

“such that the input impedance of the first transmission unit is kept to an approximately constant value” [see paragraph 0022]. Filfield discloses a driver circuit as detailed in Figure 2 that maintains constant or "approximately constant value" impedance with the help of a control voltage generated in differential amplifier portion (60).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kumar with the teachings of Filfield because Filfield provides constant impedance driver for data transfer between IC chips in order to avoid reflections and data integrity problems that would be associated with variable impedance, thus providing efficient transfer of data as detailed in paragraph 0004.

26. As to claim 27, Kumar teaches “transmission unit” [see Figure 1]. Kumar specifically teaches a single transceiver connected on a line. The single transceiver

device corresponds to “first transmission unit.” The arrangement in Figure 1 corresponds to the "communications arrangement" because it provides a transceiver device connected to a line or "transmission line."

> Filfield teaches “a plurality of operational amplifiers for transmitting information onto the transmission line” [see Figure 7, items 706, 705]. Filfield discloses differential amplifers (706, 705) which corresponds to "plurality of operational amplifiers" included in the line driver circuitry as detailed in Figure 7. The line driver of Figure 7, and also detailed in Figure 2, can be applied to mitigate the effects of reflection and mismatch while "transmitting the information onto the transmission line" as detailed in paragraph 0036.

27. As to claim 28, Kumar teaches “the impedance and the sensor being adapted” [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system such as high state (HI) and normal state (NI). These sensing protocols that are located at the receiving end of the transceiver device adapt to the impedance changes on the transmission line by transmitting during a high impedance state.

> “open in the active operating state and closed in the passive operating state” [see paragraph 0044]. Kumar specifically teaches parallel communication devices that respond to each other based on an operating state of the signal generated from those devices. This operating state represents two main states of the impedance such as normal impedance state (NI) and high impedance

state (HI). When in the HI state, this means the communications device is ready to transmit the signal.

Filfield teaches “outputs of the amplifiers” [see Figure 7, items 706, 705]. Filfield discloses differential amplifiers (706, 705) which corresponds to "plurality of operational amplifiers" included in the line driver circuitry as detailed in Figure 7. The line driver of Figure 7, and also detailed in Figure 2, can be applied to mitigate the effects of reflection and mismatch while "transmitting the information onto the transmission line" as detailed in paragraph 0036.

“the switchable electrical component’ and “switch” [see paragraph 0019]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier in response to an input. The switching means is carried out in the predrive portion (40) as detailed in Figure 2. Thus, the predrive portion of the circuit corresponds to “switchable electrical component,” which is connected by the impedance of the PFET and NFET circuits in the pre drive portion (40) because FETs have high impedances in order to minimize the interference with or "loading" of the signal source when a measurement is made.

28. As to claim 29, Kumar teaches “the communication arrangement.” [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device

which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022].

Filfield teaches “the switchable electrical component comprises an electrical resistor” [see paragraph 0059]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier section (“plurality of operational amplifiers”) in response to a data input as detailed in Figure 7, ‘Datain.’ The switching means is carried out in the predrive portion (703, 704) as detailed in Figure 7 and paragraph 0059. Thus, the predrive portion of the circuit and output stage (30) corresponds to “switchable electrical component.” The ballast resistor (8) corresponds to “electrical resistor.”

29. As to claim 30, Kumar teaches “a transmission is embodied in accordance with an xDSL transmission method” [see paragraph 0047]. Kumar specifically teaches high speed communications device that incorporate and use DSL transceiver modems.

30. As to claim 31, Kumar teaches “an external circuit arrangement which can be operatively connected to the transmission unit comprises the sensor and the impedance” [see paragraph 0028, 0053]. Kumar specifically teaches high speed communications devices that include the capability of sensing the incoming signal’s impedance on the transmission line in order to decide when to begin transmitting.

31. As to claim 32, Kumar teaches “a circuit arrangement for external connection to a transmission unit, the transmission unit for communicating information over a transmission line” [see paragraph 0028, 0053]. Kumar specifically teaches high speed communications devices that include the capability of sensing the incoming signal’s impedance on the transmission line in order to decide when to begin transmitting.

“a current operating state of the transmission unit, the current operating state having an active or a passive operating state” [see paragraph 0044]. Kumar specifically teaches parallel communication devices that respond to each other based on an operating state of the signal generated from those devices. This operating state represents two main states of the impedance such as normal impedance state (NI) and high impedance state (HI). When in the HI state, this means the communications device is ready to transmit the signal.

“an impedance assigned to a sensor” [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system such as high state (HI) and normal state (NI).

“an input impedance of the transmission unit is kept to an approximately constant value” [see paragraph 0053]. Kumar specifically teaches line sensing protocols that are designed to sense assigned impedance states of the communication system or sense “detected current operating state” such as two known and constant states: high state (HI) and normal state (NI).

It should be noted however, Kumar does not teach “a switchable electrical component, the switchable electrical component having a switch and provided as a function of the detected current operating state.”

On the other hand, Filfield teaches “a switchable electrical component” [see paragraph 0019]. Filfield discloses a switching means that applies a ground or predetermined control voltage from differential amplifier in response to an input. The switching means is carried out in the predrive portion (40) as detailed in Figure 2. Thus, the predrive portion of the circuit corresponds to “switchable electrical component,” which is connected “by the impedance” of the PFET and NFET circuits in the pre drive portion (40) because FETs have high impedances in order to minimize the interference with or "loading" of the signal source when a measurement is made.

“the detected current operating state” [see Figure 2, item 40, ‘IN’]. Filfield discloses a predrive portion of the driver which receives a data input signal which indicates “detected current operating state” as detailed in paragraph 0019.

“the input impedance of the first transmission unit is kept to an approximately constant value” [see paragraph 0022]. Filfield discloses a driver circuit as detailed in Figure 2 that maintains constant or "approximately constant value" impedance with the help of a control voltage generated in differential amplifier portion (60).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kumar with the teachings of Filfield because Filfield provides

constant impedance driver for data transfer between IC chips in order to avoid reflections and data integrity problems that would be associated with variable impedance, thus providing efficient transfer of data as detailed in paragraph 0004.

32. As to claim 33, Kumar teaches "the sensor." [see paragraphs 0029 and 0053]. Kumar specifically teaches communication protocols that decide when a high speed communication device is allowed to transmit or receive information based on the impedance state of the incoming signal. Further, these protocols include a line sensing technique that allows for sensing and detecting impedance states of an incoming signal.

33. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et. al., US Publication No. 2001/0040917 published on November 15, 2001 in view of Filfield et. al., US Publication No. 20020163360 published on November 7, 2002 further in view of deBriggard, US Patent No. 6211719 published on April 3, 2001.

34. As to claim 22, Kumar teaches "the communication arrangement." [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device

which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022].

“a second transmission unit for sending or receiving information” and teaches “is operatively connected to the transmission line” [see Figure 3; paragraph 0011]. Kumar specifically teaches more than one transceiver device as detailed in Figure 3. Each transceiver device is connected to the transmission line and is capable of sending or receiving information on the transmission line.

Kumar, Filfield do not teach “embodied in accordance with an ISDN transmission method.”

deBriggard teaches “embodied in accordance with an ISDN transmission method” [see column 4: lines 16-19]. deBriggard specifically teaches and ISDN circuit card that is utilized at a central office or communications device.

It would have been obvious to one of ordinary skill in the art at the time of applicant’s invention to combine the teachings of deBriggard—providing a power control circuit that operates a line driver when transmissions are requested by a subscriber—the with the teaching of Kumar particularly directed to high speed communication device coupled to a transmission line and transmits or receives information based on the operating impedance state of an incoming signal directed to the high speed communication device, because that would have allocated ISDN communications arrangement in addition to the xDSL communications arrangement provided in Kumar’s high speed communications device [see deBriggard: column 4, lines 16-19] .

35. As to claim 23, Kumar teaches “the communication arrangement.” [see Figure 2; paragraph 0028]. Kumar specifically teaches a high-speed communications device which corresponds to “a communication arrangement” because it transfers information along a transmission line [see paragraph 0022].

“a second transmission unit for sending and receiving information” and teaches “is operatively connected to the transmission line” [see Figure 3; paragraph 0011]. Kumar specifically teaches more than one transceiver device as detailed in Figure 3. Each transceiver device is connected to the transmission line and is capable of sending or receiving information on the transmission line.

deBriggard teaches “embodied in accordance with an ISDN transmission method” [see column 4: lines 16-19]. deBriggard specifically teaches and ISDN circuit card that is utilized at a central office or communications device.

36. As to claim 24, Kumar teaches “the sensor is adapted so that an activation signal transmitted over the transmission line is detected, and that when the activation signal is detected the active operating state of the first transmission unit is established.” [see paragraphs 0029 and 0053]. Kumar specifically teaches communication protocols that decide when a high speed communication device is allowed to transmit or receive information based on the impedance state of the incoming signal. Further, these protocols include a line sensing technique that allows for sensing and detecting impedance states of an incoming signal or “activation signal.”

37. As to claim 25, Kumar teaches “the activation signal is a wake-up signal in accordance with an ITU-T G.922 standard” [see paragraph 0016, 0029, 0053]. Kumar specifically teaches ITU-T G.922 standard employed in a MATLAB simulation of the communications device or transceivers. In addition the “activation signal” is generated by the transceiver devices and is then read and sensed by the line sensing protocols to enable transmission on one of the communications device or transceivers.

Conclusion

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH HASSAN whose telephone number is (571)270-3456. The examiner can normally be reached on Monday through Friday (available 8:00 AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571)272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Hassan/
Examiner, Art Unit 2611

/David C. Payne/
Supervisory Patent Examiner, Art Unit 2611